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| 10/812,648 | 03/29/2004 | Jose Ramirez II | 1020P18387 | 3409 |

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KACVINSKY LLC
C/O INTELLEVATE
P.O. BOX 52050
MINNEAPOLIS, MN 55402

| EXAMINER | |
|---|---|
| FOUD, HICHAM B | |

| ART UNIT | PAPER NUMBER |
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| 2616 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/812,648 | RAMIREZ ET AL. | |
| | Examiner | Art Unit | |
| | Hicham B. Foud | 2616 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *29 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-13 and 15-20* is/are rejected.

7)☒ Claim(s) *9 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03/29/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Specification*

1. The abstract is objected to because of the phrase "in accordance with one embodiment of the invention". The abstract should be directed to the entire disclosure.

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:
(1) if a machine or apparatus, its organization and operation;
(2) if an article, its method of making;
(3) if a chemical compound, its identity and use;
(4) if a mixture, its ingredients;
(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2. The use of the trademark BLUETOOTH has been noted in this application (in page 7 line 21). It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (in page 7 line 16). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

***Claim Objections***

4. Claims 11-15 are objected to because of the following informalities:

Claim 11 is objected to because of the term "computing platform" in line 2. It is suggested that the applicant changes this term to "computer".

Claims 12-15 are objected because of their dependency on the objected claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5, 17, 18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuffner (US 2003/0235167).

For claim 1, Kuffner discloses an apparatus, comprising: a radio comprising two or more physical layer blocks (See Figure 1 elements 102, 104 and 106 "Communication Resource"); and a configuration processor to arrange the two or more

physical layer blocks to communicate according to one of at least two or more radio communication protocols (see Figure 1 element 110 "System Manager" and paragraph 0013).

For claims 2 and 17, Kuffner discloses an apparatus, said two or more physical layer blocks including software defined radio logic block being programmable to cause the two or more physical layer blocks to be arranged to communicate according to at least one or two or more radio communication protocols (see Figure 1, the connection between System Manager (110) and Communication resource (102, 104 and 106) by the configuration control and see Figure 2 element SDR "software defined receiver).

For claims 3 and 18, Kuffner discloses an apparatus, further comprising a memory having a database stored thereon, the database including information to configure the two or more physical layer blocks to communicate according to one of the at least two or more radio communication protocols (see Figure 1, "deployment Rules" and System Manager (110); inherently, the system manager must have a memory to save the deployment rules to execute them and see Paragraph 0036; the suggestion of the use of RAM or ROM).

For claims 5 and 20, Kuffner discloses an apparatus, further comprising a beacon transceiver to transmit a beacon to a remote device (see Figure 4 elements 310 or 350 "Transceiver"), wherein a beacon transmitted by said beacon transceiver provides an indication of the one or more available radio communication protocols (see Figure 4 "User-Defined modes", See Figure 6 boxes 602 and 610 and see paragraph 0032 lines 3-5; user configures the available communication resources; inherently the

user receives a beacon that has information about the availability of the communication resources).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 6, 7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips (US 6,188,898).

Claims 6 and 11, Phillips discloses a method, comprising: receiving from a remote device a reply to a transmitted beacon (see column 3 lines 20-23; the base stations also provides a beacon function), the reply indicating a desired radio communication protocol (see column 3 lines 35-37; the terminal will emit a request for service); determining whether the desired radio communication protocol is supported and in the event the desired radio communication protocol is supported, programming a physical layer block to communicate according to the desired radio communication protocol (see column 56-64; when the protocol has been identified, the corresponding software package is retrieved and downloaded. The details of the mobile terminal are then checked to ensure that the terminal is registered and the call is set up according to the desired protocol).

For claims 7 and 12, Phillips discloses a method, further comprising, if the desired communication protocol is not supported, determining whether a download of

the desired radio communication protocol is available, and if available, downloading the desired radio communication protocol and programming the radio to communicate according to the desired radio communication protocol (see column 56-64; when the protocol has been identified, the corresponding software package is retrieved and downloaded. The details of the mobile terminal are then checked to ensure that the terminal is registered and the call is set up according to the desired protocol).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuffner in view of Allison et al (US 6,167,032).

For claim 4, Kuffner discloses all the subject matter with the exception of further comprising a hub, and said radio including at least one or more media access control blocks to couple to a network through said hub. However, Allison et al teaches an Ethernet MAC chip that couples to a network (Ethernet physical layer) through a hub (Ethernet interface) (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer" and element 34 "Ethernet interface"). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teaching of Allison et al into the invention of Kuffner for the purpose of connecting to the Ethernet network using MAC addresses and through the hub that is used as an interface.

For claim 16, Kuffner discloses an apparatus, comprising: a network interface circuit having a radio comprising two or more physical layer blocks (See Figure 1 elements 102, 104 and 106 "Communication Resource); an omnidirectional antenna to couple to said radio (see Figure 1 elements 122, 124 and 126); and a processor to arrange the physical layer block to communicate according to one of at least two or more radio communication protocols (see Figure 1 element 110 "System Manager" and paragraph 0013). Kuffner discloses all the subject matter with the exception of wherein said two or more physical layer blocks have a media access layer block being implemented at least in part by said processor. However, Allison et al teaches an Ethernet MAC chip that couples to a network (Ethernet physical layer) (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer"). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teaching of Allison et al into the invention of Kuffner for the purpose of connecting to the Ethernet network using MAC addresses.

For claim 19, Allison et al discloses an apparatus further comprising a hub, and said radio including at least two or more physical layer blocks and at least one or more media access control blocks to couple to a network through said hub (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer" and a hub: element 34 "Ethernet interface").

8. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Kuffner.

For claims 8 and 13, Phillips further discloses a method wherein if a physical layer block is not currently, then programming at least one physical layer block to operate according to the desired radio communication protocol and then communicating with the remote device according to the desired radio communication protocol (see column 56-64; when the protocol has been identified, the corresponding software package is retrieved and downloaded. The details of the mobile terminal are then checked to ensure that the terminal is registered and the call is set up according to the desired protocol). Phillips discloses all the subject matter with the exception of determining whether a physical layer block is currently programmed to operate according to the desired radio communication protocol, and if so, communicating with the remote device according to the desired radio protocol. However, Kuffner discloses a method wherein a physical layer block is currently programmed to operate according to the desired radio communication protocol, and communicating with the remote device according to the desired radio protocol (see Figures 1, 4 and paragraph 0014; 102 might be by default be an 800 MHz and 104 might by default be a 1575 MHZ). Also, Kuffner suggested that these physical layer blocks (102 and 104) could be subsequently reassigned as well. Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teachings of Kuffner into the invention of Phillips for the purpose of increasing the efficiency, flexibility and the adaptability of the system.

9. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Allison et al.

For claims 10 and 15, Phillips discloses a method further comprising programming two or more physical layer blocks to communicate according to two or more radio communication protocols (see Figure 2 and column 3 lines 23-27; the system may provide access to mobile terminals using the GSM 900, DECT and DCS 1800). Phillips discloses all the subject matter with the exception of coupling the physical layer blocks to a network through a hub. However, Allison discloses the coupling of physical layer blocks to a network through the hub (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer" and a hub: element 34 "Ethernet interface"). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teachings of Allison et al into the invention of Phillips for the purpose of connecting to another network through the hub such as an Ethernet network using MAC and therefore increasing the adaptability and flexibility of the system.

***Allowable Subject Matter***

10. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claim 14 would be allowable if rewritten to overcome the objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hicham B. Foud whose telephone number is 571-270-1463. The examiner can normally be reached on Monday - Thursday 10-3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HF

Hicham Foud

Chau T. Nguyen

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600